

Safety Task Group Survey

June 30, 2006



2006 National Ready Mixed Concrete Association Enhanced Safety Benchmarking Survey Results

Executive Summary

The National Ready Mixed Concrete Association surveyed member companies to compile the 2006 Safety Benchmarking Survey Report. The report is based on information contained in the OSHA 300A summary log of member companies that responded to the information request. Twenty-five companies responded, and they collectively reported more than 38.5 million employee hours. (This number of hours equals approximately 19,300 employees working for member companies). This year's report includes a 3-year standard based on all responses since calendar year 2003. Table 4 illustrates the metrics derived from this year's survey responses, which summarize calendar year 2005.

The companies are divided into three categories based on the number of employee hours: less than 1 million; 1 million – 3 million; and more than 3 million employee hours. The lost-time incidence rate is termed *days away from work injury and illness (DAFWII)*, and days away from work and restricted duty/job transfer are combined to represent the *lost work days injury and illness (LWDII)*. *DAFWII* is a measure of the number of cases that involve days away from work, and *LWDII* includes cases with days away from work plus cases with job transfer, restricted and/or both.

Fifteen companies reported in the less than 1 million hours category. Six companies reported in the 1 million – 3 million hours category, and four companies reported in the greater than 3 million hours. Collectively companies reported eighteen illnesses, with the largest category being 'other', which accounted for ten illnesses. The combined industry severity rate (*SR*) was 40, which is more than a fifty percent decrease from last year, indicating that injuries and illnesses required less time away from work in 2005 than in the prior year. This means that forty lost days occurred as a result of injury or illness in calendar year 2005 for every one hundred employees. All metrics' measurements improved this year over 2005, indicating that respondents overall performed better in managing injury and illness at the job site and on the road.

The most common type of injury continues to be strains and sprains. More than one-half of all reported injuries were strains or sprains. Seventeen percent of injuries occurred when an employee was struck by an object, and thirty percent occurred when the employee fell, either on the same level or from a different level.

Definitions of terms used in tables

(All rates are based on incidents per 200,000 employee hours)

- ❑ The *total case incidence rate (TCIR)* represents the number of lost day injuries/illnesses, restricted duty day injuries/illnesses and injuries/illnesses that require professional medical treatment without lost or restricted duty days.
- ❑ The *days away from work injury/illness incidence rate (DAFWII)* illustrates the number of injuries/illnesses that result in the employee being away from work for one or more full day(s) of work.
- ❑ The *lost work days injury/illness incidence rate (LWDII)* shows the number of injuries/illnesses that result in either lost days, restricted duty days, or both.
- ❑ The *medical case incidence rate* is a measure of incidents where employees seek professional medical treatment and miss no work days and have no restricted duty days.

The following formula is used to arrive at incidence rates.

$$\frac{(Number\ of\ Incidents)(200,000)}{Number\ of\ Employee\ Hours}$$

The following formula is used to arrive at severity rates.

$$\frac{(Number\ of\ lost\ work\ days)(200,000)}{Number\ of\ employee\ hours}$$

Discussion of rates of companies reporting 3 million hours or more

Four companies reported more than three million employee hours. There were 91 injuries/illnesses that incurred days away from work, and 382 cases resulted in the employee being either transferred to another job or on restricted duty. There were 123 incidents that required professional medical treatment but incurred no time away from work, and there were 2,716 days lost as a result of injury/illness.

Table 1 Data for companies reporting more than 3 million employee hours

	Total Injuries/Illnesses	Lost Work days Injuries/Illnesses	Lost Work days/Restricted duty days Injuries/Illnesses	TCIR	DAWFII	LWDII	Medical Case Incidence Rate	Severity Rate
20,800,950	574	91	382	5.5	0.9	3.7	1.2	26

Discussion of rates of companies reporting between 1 – 3 million employee hours

Six companies reported 12,468,560 employee hours in the 1 – 3 million category. There were 148 injuries/illnesses that resulted in days away from work, and 111 with job transfer or restricted duty. There were also 110 cases where professional medical treatment was called for, but resulted in no days away from work, job transfer or restricted duty. There were 4,445 days away from work.

Table 2 Data for companies reporting 1 – 3 million employee hours

Employee Hours	Total Injuries/Illnesses	Lost Work days Injuries/Illnesses	Lost Work days/Restricted duty days Injuries/Illnesses	TCIR	DAFWII	LWDII	Medical Case Incidence Rate	Severity Rate
12,468,560	367	148	111	5.9	2.4	1.8	1.8	71

Discussion of rates of companies reporting less than 1 million hours

Fifteen companies reported 5,303,736 employee hours. This group represents the largest category of respondents. There were 38 cases that incurred lost days, and 74 incidents resulted in job transfer or restricted duty. There were 67 medical cases with no lost work days. There were 649 days away from work.

Table 3 Data for companies reporting less than 1 million employee hours

Employee Hours	Total Injuries/Illnesses	Lost Work days Injuries/Illnesses	Lost Work days/Restricted duty days Injuries/Illnesses	TCIR	DAFWII	LWDII	Medical Case Incidence Rate	Severity Rate
5,303,736	161	38	74	6.1	1.4	2.8	2.5	24

Comparison of industry survey data among individual categories

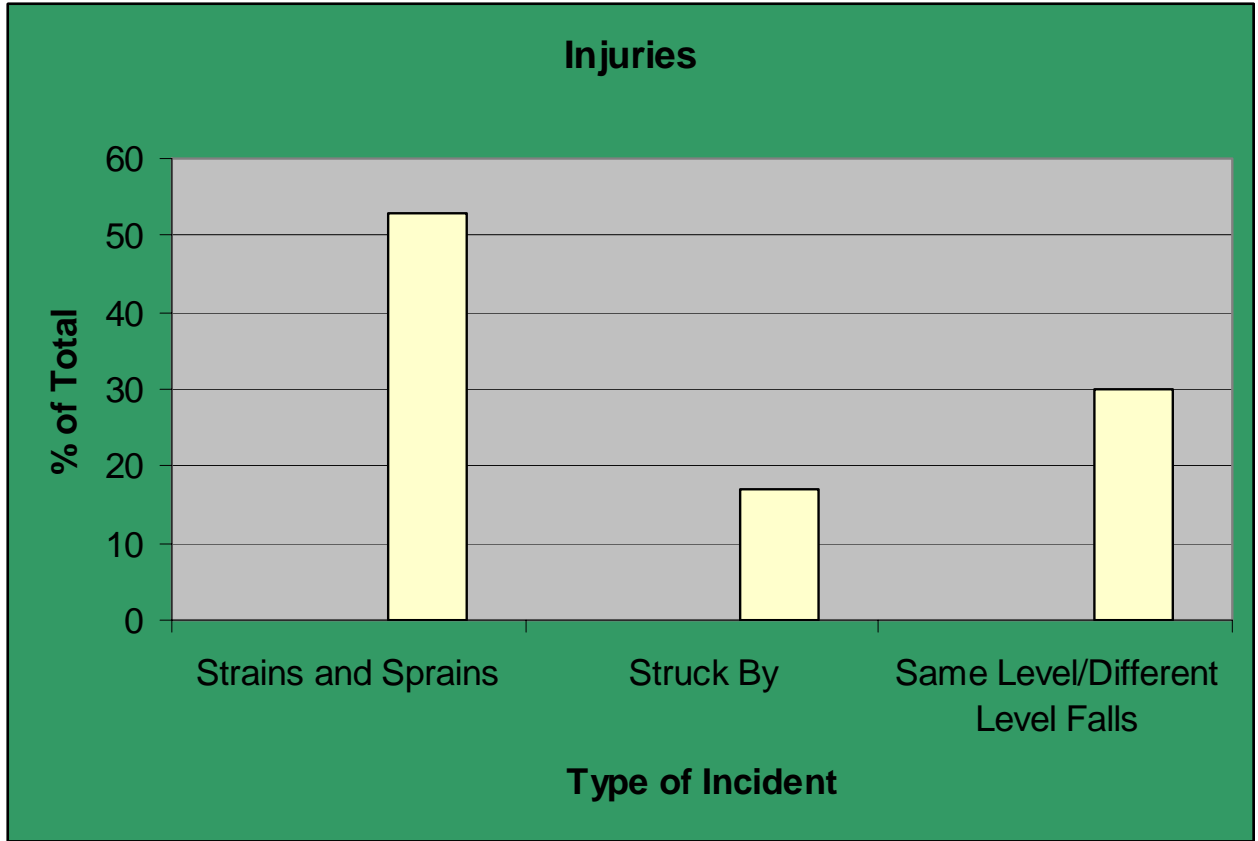
The most significant change this year is in how category size is determined and how metrics are reported. Rather than consider companies with more than 5 million hours, a new category has been chosen to include companies that report at least 3 million employee hours. Similarly another category has emerged to consider companies that report in the 1 – 3 million hours range. The change in reporting categories is not expected to adversely impact the overall injury and illness rates.

In the combined industry data, all metrics were lower in 2005 than in 2004 with the exception of the medical case incidence rate and the SR. The medical case incidence rate posted a gain of 0.5; this metric indicates that professional medical treatment (doctor visit) was required, but that no days were lost and that there was no restricted duty work. The most significant reduction came in the SR. Best known as the measure of how serious an injury or illness is, the SR dropped from 82 in 2004 to 40 in 2005. The SR is also an indicator of worker's compensation resources that are dedicated to rehabilitating an employee in return to work programs.

Companies that reported in the less than 1 million hours and in the greater than 3 million hours performed well in managing return to work. The SRs for these categories were 24 and 26 respectively. Companies reporting in the 1 – 3 million hours category posted an SR of 71.

In comparing the 3-year standards for 2004 and 2005, both the TCIR and the DAFWII rates are identical. The LWDII and the medical case incidence rates are very slightly reduced this year relative to 2004. The 3-year standard SR is also identical.

Fifty-three percent of all injuries are sprains or strains, almost the same as last year. Thirty percent are falls, either tripping or slipping on the same level or falling from a different level. Seventeen percent of all injuries are the result of the employee being struck by some object.



The chart above illustrates the types of incidents that the 2006 Safety Benchmarking Survey captured. As in past years, strains and sprains continue to be the most common type on injuries, followed by injuries resulting from same and different level falls and finally injuries resulting from employees being struck by an object. Companies can use this information in crafting employee safety education programs to prevent occurrence of these types of events.

Number of Employee Hours	Category by Company Size	Number of Injuries/Illnesses	Number of Lost Workdays	Number of Lost Workday Injuries/Illnesses ¹	Number of Lost Workday and Restricted Duty Injuries/Illnesses ²	Total Case Incidence Rate (TCIR) ³	DAFWII ⁴	LWDII ⁵	Medical Case Incidence Rate ⁶	Severity Rate
38,573,246	All Industry Data	1,102	7,810	277	567	5.7	1.4	2.9	1.6	40
5,303,736	Less than 1 Million Employee Hours	161	649	38	74	6.1	1.4	2.8	2.5	24
12,468,560	1 Million – 3 Million Employee Hours	367	4,445	148	111	5.9	2.4	1.8	1.8	71
20,800,950	More than 3 Million Employee Hours	574	2,716	91	382	5.5	0.9	3.7	1.2	26
Not available	<i>BLS Statistical Data for NACIS 32732 in 2004</i>	Not available	Not available	Not available	Not available	7.2	2.9	4.8	2.4	Not available
141,987,847	All Industry Data – CY 2003, 2004, 2005	4,317	36,535	1,093	2,652	6.1	1.5	3.7	2.0	51

Table 4 – All Industry Data 2006

¹ Lost work day injuries and illnesses are those cases where the individual employee was away from work for one day or more excluding the day of injury.

² Restricted duty injuries/illnesses occur when an employee cannot perform his/her normal work activities for one day or more excluding the day of injury.

³ The total case incidence rate is calculated by summing fatalities, lost day injuries/illnesses, restricted duty injuries/illnesses and medical cases, multiplying by 200,000, and then dividing by employee hours for the period of time, in this case for calendar year 2005.

⁴ DAFWII = (#cases with days away from work)(200,000)/employee hours in calendar year 2005

⁵ LWDII = (#cases with days away from work plus those with job transfer, restricted duty, or both)(200,000)/employee hours in calendar year 2005

⁶ Medical Case Incidence Rate = $\frac{\text{\# of cases that required professional medical attention with no lost days or restricted duty}}{\text{Employee hours, in this case for calendar year 2005}}(200,000)$

Number of Employee Hours	Category by Company Size	Number of Injuries/Illnesses	Number of Lost Workdays	Number of Lost Workday Injuries/Illnesses ⁷	Number of Lost Workday and Restricted Duty Injuries/Illnesses ⁸	Total Case Incidence Rate (TCIR) ⁹	DAFWII ¹⁰	LWDII ¹¹	Medical Case Incidence Rate ¹²	Severity Rate
39,580,018	All Industry Data	1,206	16,257	323	792	6.1	1.6	4.0	2.1	82
8,413,499	100,000- 1 Million Employee Hours	375	3,528	95	227	8.9	2.3	5.4	3.5	84
19,040,320	1 Million – 5 Million Employee Hours	542	8,077	210	374	5.7	2.2	3.9	1.8	85
12,126,199	More than 5 Million Employee Hours	289	4,652	18	191	4.8	0.3	3.2	1.6	77
Not available	<i>BLS Statistical Data for NACIS 32732 in 2003</i>	Not available	Not available	Not available	Not available	6.8	2.9	4.2	2.6	Not available
156,124,791	All Industry Data – CY 2002, 2003, 2004	4,795	39,545	1,150	3,026	6.1	1.5	3.9	2.3	51

Table 5 – All Industry Data 2005

⁷ Lost work day injuries and illnesses are those cases where the individual employee was away from work for one day or more excluding the day of injury.

⁸ Restricted duty injuries/illnesses occur when an employee cannot perform his/her normal work activities for one day or more excluding the day of injury.

⁹ The total case incidence rate is calculated by summing fatalities, lost day injuries/illnesses, restricted duty injuries/illnesses and medical cases, multiplying by 200,000, and then dividing by employee hours for the period of time, in this case for calendar year 2004.

¹⁰ DAFWII = (#cases with days away from work)(200,000)/employee hours in calendar year 200

¹¹ LWDII = (#cases with days away from work plus those with job transfer, restricted duty, or both)(200,000)/employee hours in calendar year 2004

¹² Medical Case Incidence Rate = (# of cases that required professional medical attention with no lost days or restricted duty)(200,000)
Employee hours, in this case for calendar year 2004

Number of Employee Hours	Category by Company Size	Number of Injuries/Illnesses	Number of Lost Workdays	Number of Lost Workday Injuries/Illnesses ¹³	Number of Lost Workday and Restricted Duty Injuries/Illnesses ¹⁴	Total Case Incidence Rate (TCIR) ¹⁵	DAFWII ¹⁶	LWDII ¹⁷	Medical Case Incidence Rate ¹⁸	Severity Rate
63,834,583	All Industry Data	2,009	12,468	493	1,293	6.3	1.5	4.1	2.1	39
247,188	Less than 100,000 Employee Hours	12	33	6	11	9.7	4.9	8.9	0	27
14,210,698	100,000- 1 Million Employee Hours	636	8,399	218	455	9.0	3.1	6.4	2.5	118
24,591,256	1 Million – 5 Million Employee Hours	690	8,020	163	418	5.5	1.3	3.4	2.1	65
24,785,441	More than 5 Million Employee Hours	671	4,036	106	409	5.4	0.86	3.3	2.1	33
Not available	<i>BLS Statistical Data for SIC 3273 in 2002</i>	Not available	Not available	Not available	Not available	9.0	3.6	5.3	3.7	Not available
154,858,369	All Industry Data – CY 2001, 2002, 2003	5,515	38,329	1,318	3,363	7.1	1.7	4.3	2.7	50

Table 6 – All Industry Data 2004

¹³ Lost work day injuries and illnesses are those cases where the individual employee was away from work for one day or more excluding the day of injury.

¹⁴ Restricted duty injuries/illnesses occur when an employee cannot perform his/her normal work activities for one day or more excluding the day of injury.

¹⁵ The total case incidence rate is calculated by summing fatalities, lost day injuries/illnesses, restricted duty injuries/illnesses and medical cases, multiplying by 200,000, and then dividing by employee hours for the period of time, in this case for calendar year 2003.

¹⁶ DAFWII = (#cases with days away from work)(200,000)/employee hours in calendar year 2003

¹⁷ LWDII = (#cases with days away from work plus those with job transfer, restricted duty, or both)(200,000)/employee hours in calendar year 2003

¹⁸ Medical Case Incidence Rate = (# of cases that required professional medical attention with no lost days or restricted duty)(200,000)
Employee hours, in this case for calendar year 2003

Number of Employee Hours	Category by Company Size	Number of Injuries/Illnesses	Number of Lost Workdays	Number of Lost Workday Injuries/Illnesses ¹⁹	Number of Lost Workday and Restricted Duty Injuries/Illnesses ²⁰	Total Case Incidence Rate (TCIR) ²¹	Lost Days Incidence Rate ²²	Recordables Incidence Rate ²³	Medical Case Incidence Rate ²⁴	Severity Rate
52,710,190	All Industry Data	1,580	10,820	334	941	6.0	1.3	3.6	2.4	41
666,382	Less than 100,000 Employee Hours	29	566	14	18	8.7	4.2	5.4	3.3	170
7,153,105	100,000- 1 Million Employee Hours	258	1,773	60	168	7.2	1.7	4.7	2.4	50
21,607,870	1 Million – 5 Million Employee Hours	595	4,896	149	376	5.5	1.4	3.5	1.9	45
23,282,833	More than 5 Million Employee Hours	698	3,585	111	379	6.0	0.95	3.3	2.7	31
Not available	<i>BLS Statistical Data for SIC 3273 in 2001</i>	Not available	Not available	Not available	Not available	10.2	4.0	5.7	4.5	Not available

Table 7 – All Industry Data 2003

¹⁹ Lost work day injuries and illnesses are those cases where the individual employee was away from work for one day or more excluding the day of injury.

²⁰ Restricted duty injuries/illnesses occur when an employee cannot perform his/her normal work activities for one day or more excluding the day of injury.

²¹ The total case incidence rate is calculated by summing fatalities, lost day injuries/illnesses, restricted duty injuries/illnesses and medical cases, multiplying by 200,000, and then dividing by employee hours for the period of time, in this case for calendar year 2002.

²² Lost Days Incidence Rate = (# of injuries/illnesses that incurred lost days)(200,000)/employee hours, in this case for calendar year 2002.

²³ Recordables Incidence Rate =
$$\frac{\text{\# of injuries/illnesses that incurred lost days} + \text{\# of injuries/illnesses that resulted in restricted duty/job transfer}}{\text{Employee hours, in this case for calendar year 2002}}(200,000)$$

²⁴ Medical Case Incidence Rate =
$$\frac{\text{\# of cases that required professional medical attention with no lost days or restricted duty}}{\text{Employee hours, in this case for calendar year 2002}}(200,000)$$